

The Washington DC Section of SME proudly presents

PRISCILLA P. NELSON - Assessing Resilience Impacts from Integrated Above/Below Ground Urban Infrastructure

Abstract: The underground construction industry has consistently provided the nation with needed infrastructure. The Infrastructure networks are interdependent affecting overall system performance, reliability and expected life. These systems are also diversified with gridded, distributed and local components which may not work together seamlessly. This threatens to degrade robustness and resilience in service delivery as the population is growing increasingly risk averse. We need a framework with metrics for infrastructure analysis that can include complex systems representations for all sectors. In order to make better decisions concerning the use of underground space, particularly in urban environments, the functions and operations of the human and physical infrastructure systems must be understood in an integrated framework with common metrics and representations. Decision makers need an understanding of the valuation for underground space as a resource in order to consider life-cycle engineering and trade-offs for above/below-ground infrastructure investments.

- Date:** Wednesday February 13, 2019
Time: Social Hour 11:30 - 12:00 am
Section Business/Luncheon 12:00 - 2:30 pm
Location: Maggiano's Little Italy At Tysons Galleria
2001 International Drive
McLean, Virginia 22102
Metro Access: Silver Line Tysons Corner Station next to Route 123
Buffet Luncheon:
Soup: Creamy Tomato Basil
Choice of 3 Salads: Caesar, Orzo Pasta, Italian Tossed
Choice of 3 Sandwiches: Fazio's Italian Hero
Roast Beef (Blue Cheese & Mixed Greens)
Grilled Vegetables with Lemon & Spicy Basil Mayo
Choice of 3 Deserts: Triple chocolate Cookies
Vera's Lemon Cookies
Seasonal Whole Fruit
Cost: \$ 25 for DC Section Members and Guests
RSVP: Please reply by email to George K. Schuler at gkschuler@Verizon.net by Friday February 8, 2019

Biography: Priscilla P. Nelson is professor and head of mining engineering at the Colorado School of Mines (CSM). She has been involved in geology, geotechnical engineering and underground construction for more than 35 years. She has published more than 175 technical publications, is a distinguished member of the American Society of Civil Engineers (ASCE) and was elected to the Moles in 1995. Nelson received a B.S. degree in geology from the University of Rochester, two master's degrees - geology from the Indiana University and structural engineering from the University of Oklahoma and a Ph.D. from Cornell. She also serves as associate director for the DOT UTC Underground Transportation Infrastructure Center at CSM. In 2008, she received the Kenneth Andrew Roe Award from the American Association of Engineering Societies, and she was the 2011 recipient of the ASCE Henry L. Michel Award. In 2018, she received the Outstanding Educator award from the UCA of SME